The Wobbly Oscillator

Cuyahoga Amateur Radio Society

Nov - Dec 2024 Volume 54 Number 11

Hams Who Serve

Holiday Party Dec. 13

Elections at November Meeting

From The Prez

Toby, WT8O

Holiday Party

We have arranged to have our annual Holiday Party held at the Brew Garden restaurant on Friday, December 13th. We have had our parties there in the past and the venue was always comfortable and enjoyable. The Brew Garden is located at 18590 Bagley Road in Middleburg Heights, just east of the I-71 interchange and across from the Southwest Medical Center. The party will begin at 6:00 pm.

It is important we give the restaurant a close approximation of the number of people attending, so please notify me that you will be attending and how many people will be in your party. Remember, we always extend invitations to family and friends. Please contact me with your reservations via email (wt8o@att.net), phone (440-525-6109), text, on the nets, or at the November meeting.

Now that we have secured a venue, we can plan activities for the party. Once again, contact me with your ideas which will be welcomed and appreciated.

After dealing with COVID and the restrictions in restaurant policies in the aftermath, let's seek to make this the best Holiday Party we have ever had.

Election of Officers and Board Members

We will be holding our annual election of officers and odd-year Board members at the November meeting. In an attempt to attract new people to fill the positions, we have had nominations at both the September and October meetings and stated we will take nominations (including self-nominations) right up to the time of the election. The slate includes all current officers and Board Member Eddie, KD8FTS, with new Board nominations for Mark, KC8ESG, and Al, KF8BCC.

Welcome New Editors

When our previous *Wobbly Oscillator* editor, Tom Wayne, WB8N, announced his retirement in 2016 we requested a replacement. No one stepped up. I said I would try to cover for a couple of months until we found someone. Well, eight years later we have one, actually two. Perry, KB8AYQ, let me know early this year during our licensing classes he would be interested as soon as he cleared up some personal responsibilities, one of which was substituting as editor for another publication. Perry spent his career in the publishing business and would definitely upgrade our newsletter. Later in the year, when I announced my retirement as editor, another member, Yuri, W4YSW, volunteered to serve.

Perry and Yuri will be teaming up to bring you the next *WO*. I can't wait to see it.

WELCOME NEW MEMBERS

PAM MILLER KBOPM

KIRK MILLER WOKM

October 2024 Meeting Minutes

LOCATION - The meeting was held on October 8th at the Busch Funeral Home on Ridge Road in Parma, Ohio.

CALLED TO ORDER - President Toby Kolman, WT8O, called the meeting to order at 7:30 PM.

PLEDGE OF ALLEGIANCE - Those present pledged allegiance to the flag of the United States of America.

INTRODUCTIONS - Those present introduced themselves. The meeting had 27 attendees.

MEETING MINUTES - The September minutes, as published in the October issue of the *Wobbly Oscillator* (*WO*), were approved.

TREASURER'S REPORT - Toby Kolman, WT8O, gave an update on behalf of Matt Perlman, KE8OZU. No concerns were reported with the financials.

We had a lot of new faces at the October meeting.

David, AC8TN, offered all present a chance to still enroll in the CW class.

PRESIDENT'S REPORT - Toby Kolman, WT8O, reported the following:

- Vote on new members - Bill Sheehan, K2WJS, Randy Goudy, KF8CFC, Brad Davis, N8WLI, Kirk Miller, W0KM, and Pam Miller, KB0PM.
- Update on Ron.
- Please help with pictures during the meetings
- Mentoring sessions (suggestion - Before meetings) - Send topics to Toby.
- Badge choices - Let Toby know what you would like.
- WO Contributions - Toby is retiring as editor at the end of the year. Thank you to everyone who submitted articles. Send Toby any items you have for sale or are looking for.
- Roster accuracy and availability.

VP REPORT - On behalf of Ron, K8RJH, Toby, WT8O, reminded folks to pay their ARRL dues through the club.

SECRETARY'S REPORT - Secretary Matt Neely, NU8H. No updates.

PUBLIC SERVICE - Chuck, K8CVM, shared that all CARS members are invited to the local ARES meetings. The meetings are held at the Helwig Whistle Stop on the third Tuesday of the month. Visit https://n8esg.org/ for details and to volunteer. Chuck reported the following:

- The presentation at the next meeting will be on Meshtastic.
- Jamboree on the Air (JOTA) and Jamboree on the Internet (JOTI) are October 19th through the 20th.
- Reminder about the ARRL Foundation grant process.
- Shared an article from the November issues of *QST* on automated antenna switches.
- Thanks to all the CARS members who participated in the ARES events this year.
- The ARES trailer is available for CARS members to use.

VE UPDATE - Metro, W8MET, shared that the next session is November 10th at 9:15 AM at the Old Elmwood Recreation Center, 200 Pete Wisniesky, Independence 44131.

Bill, KD8QBB, hit it big winning the 50/50 as Joe, KD8BAL, hands him the cash.

PROGRAM COMMITTEE - Joe, KD8BAL, reported that:

- At today's meeting, Axel Fisser, K8AXX, will present Solar Lithium Power, Sustainable Power for Your Station.

OLD BUSINESS - Toby, WT8O, led a discussion on the following:

- CARS 10 Meter net - We'll try to restart interest in this.
- Positions needing to be filled - Holiday Party/Picnic Committee Chairman. We have a potential volunteer, but we still need help.

NEW BUSINESS - Toby, WT8O, led a discussion on the following:

- Nominations for Officer and board elections
    - Motion to nominate the current list of officers
    - The following members were nominated for the three board positions that will be up for election – Eddie,KD8FTS;Mark, KC8ESG, and Al, KF8BCC.
- A lot of donated equipment was sold at the Hamfest. The remaining items are listed in the *WO*
- The City of Seven Hills asked if we could help with this year's Christmas Parade. If you are interested in volunteering, let Toby know.
- Shared information on the Wednesday evening net, hosted each Wednesday at 9:00 PM on the CARS repeaters.
- David, AC8TN, shared information on the CW class. If you are interested, contact David for more details.

REFRESHMENT - Thank you to Al, KF8BCC; Matt, NU8H, and John, NU8Y.

NEXT MEETING - The Cuyahoga Amateur Radio Society's next meeting will be on November 12th at the Busch Funeral Home on Ridge Road in Parma, Ohio.

Axel, K8AXX, gave an in-depth presentation on lithium batteries. Guaranteed, everyone learned something.

ADJOURNMENT - Toby, WT8O, adjourned the meeting.

50/50 Drawing - Bill, KD8QBB, won the 50/50 drawing and donated his winnings back to the club.

Submitted by Matt Neely, NU8H, CARS Secretary.

Confessions and Observations of an Addict
Fred, K8JG

Okay, I admit it. I am a recovering (kit builder) addict. I miss the hours spent reading the well-crafted instruction manuals, inventorying the copious parts, contemplating the assembly process, envisioning the finished project and, as a final step, delighting in a project's passage of "the smoke test." I valued the craftsmanship that was embedded in my newly created test equipment, audio equipment and ham radio gear. Those memorable days of kit building are largely long gone. Or so I thought.

One further admission. I am a QRO guy…not QRP. Guided by Part 97, I use the power necessary to achieve the QSO. At my 82 years, I am not rewarded by the challenge of struggling for that elusive QRP station somewhere in the ether. But then it happened. Wandering into the 4 State QRP Group (also called Four State) website (www.4sqrp.com) , what should appear to my wondering eyes…an eye candy kit. David Cripe, NM0S, has designed a visually inviting and fully functional QRP tuner/coupler offered only in kit form. Alas, to satisfy my kit craving, I succumbed and bought the QRP tuner kit ($45 + USPS shipping). The finished project is pictured here perhaps destined to become a shelf display. Recall I said that I don't do QRP!

A few comments about the kit and the tuner/coupler are in order. I really enjoyed and learned from the instructive and explanatory nature of the earlier kit manuals as from Heathkit and EICO to name two. Not so with the 4 Square kit. By way of explanation, the "assembly manual" is in download form from the website. That said, it should be easy for 4 Square to readily correct and update the manual as necessary. The "latest" manual is version 1.4 last revised in December, 2015! There are many reasons the manual should be revised. The manual relies on paragraphical assembly steps that refer to labeled pictures that lack definition and context. The instructions begin with the winding of the toroidal inductor but did not mention whether the toroid is viewed from above or below making the direction of the windings uncertain. The manual refers to lengths of wire to be prepared but doesn't specify the wire type, gauge, or insulation and it was not included as shipped. The manual refers to the (contact) lugs on the inductor switch with the above mounted toroid winding and progressing counterclockwise but the switch lug identification in the manual is incorrect. I had to call David Cripe to verify that my assumptions were correct. That's the bad news. Once the toroid is wound and installed, the installation of the discrete components is straightforward. The top, bottom and four sides, are easily assembled to form the enclosure by soldering adjacent panel tabs together.

The good news is that unlike that green tuner pictured on their website, the finished product is a handsome black finished enclosure (3" X 3" X 2") replete with appropriate lettering (as shown). The BNC connectors are

robust and firmly mounted. The unit is equipped with two LEDs (red and green). The green LED indicates output power (variable brilliance) and the red LED indicates reflected power (again, variable brilliance). Terminating into a long-wire or coax, at 2:1 VSWR, the lamps are of equal brilliance. Tuning is easy and intuitive and fun to dial up the green brilliance and down the red brilliance once the appropriate inductor step (12 steps) has been selected. The manual reports that the maximum power throughput has been tested at 10 watts: perfect for QRP! While the insertion loss is (when properly matched) reported as "low" the loss is not specified. The author utilized a Bird 43 wattmeter with a 5 watt slug to verify performance.
The look and feel of the tuner/coupler unit is both professional and fun to use. And it temporarily satisfied my kit craving.

Rich Williams, NW8X/SK
Toby, WT8O

Sadly, we must inform everyone of the passing of Rich Williams, NW8X/SK.

Rich was one of the most unassuming, amiable fellows I have ever had the pleasure of being acquainted with. When I think of Rich, I picture him showing up at Field Day, striding toward me, donning work gloves, and asking "What do you want me to do?" He quietly went to work assisting with the setup and teardown. During the event, although he was not on the mike often, he always managed to make several contacts. As the clock approached 2:00 PM on Sunday, there would be Rich ready to help. The cool thing was he always stayed to the bitter end, not leaving till all the equipment was loaded up and the area completely cleaned up. That would be nice to say about all the participants who in the future could do the same in his honor. Rich always functioned as a team player quietly helping out.

Rich used to make most of the meetings serving as part of the refreshment committee for a number of years. He checked into the weekly nets from time to time. Rich attended many other club activities and often rode the bus to the Dayton Hamvention. He usually joined us at the holiday parties and summer picnics.

Rich called me a year or so back saying he would not be renewing his membership. He didn't sound all that great and only said it would be difficult for him to participate. I was stunned and did not think it wise to question his decision; I only
thanked him for his assistance over the years, wished him the best and reminded him we would always welcome him back.

Rich turned 87 in July.

Next CARS Meeting

Tuesday, Nov. 12 - 7:30 PM

Busch Community Room
7501 Ridge Rd. - Parma

Annual Elections of Officers and Board Members

See Website for Details - www.2cars.org

November Net Sked

Nov	6	AC8NW
Nov	13	AC8TN
Nov	20	WT8O
Nov	27	KD8ACO

Nets are run every Wednesday at 9:00 PM on:

146.820 (PL 110.9)

443.825(+) PL Tone 131.8
Digital Yaesu Fusion / C4FM
Linked to the 146.82 Repeater

EchoLink Node 343470 (K8ZFR-R)

Allstar Node 47067

WIRES X Node 91242-Room 01242

November VE Session

The next VE testing session will be held Sunday, November 10th, at 9:15 AM at the Old Elmwood Recreation Center, 6200 Pete Wisniesky Parkway, Independence 44131. Directions and a map are on the CARS website homepage. For information or an appointment please contact Metro, W8MET, at 216-520-1320 or metro351@sbcglobal.net

As always, walk-ins are welcome.

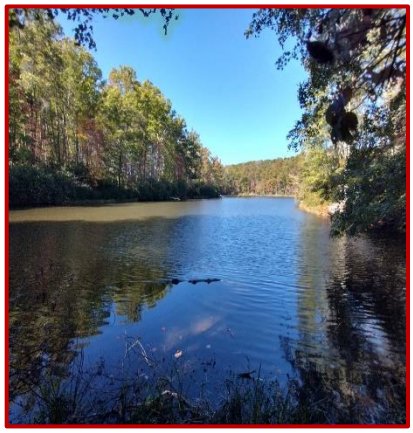
Fall Trip to West Virginia

Andy, KD8SCV

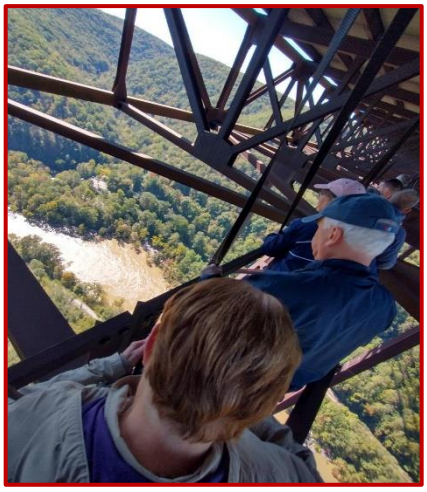
Although we are blessed with lush woodlands and beautiful scenery here in Ohio, our neighbor states, in this case West Virginia, also have much to offer. Thanks to an idea from our friends, Ken and Nancy, who hail from Winchester, Virginia, we enjoyed an adventure with them in the north end of New River Gorge National Park the second week of October.

For Judy and I, it was our first visit to this national park, our country's newest (2020). Running for 53 miles along the New River, the park features some of the prettiest and most dramatic scenery in the Eastern U.S. Its iconic feature, the New River Gorge Bridge, spans over 3,000 feet from north to south over the New River, and at its highest point, stands more than 850 feet above the river.

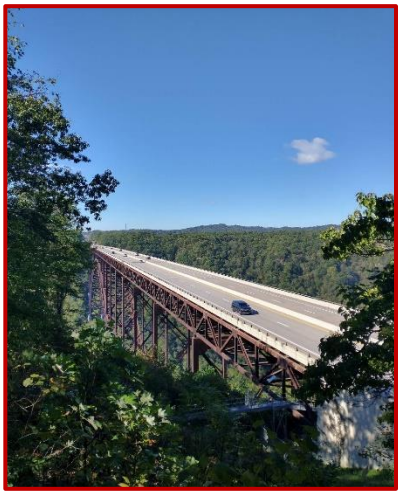
A catwalk directly under the bridge deck and spanning its length is open for guided walks, which we took advantage of. Each of us wore a rock climber's harness and were securely tethered to a stout cable while on the catwalk. The experience? Breathtaking! Not only because of the height, but because of the spectacular views. (The bridge's movements and vibrations from the vehicular traffic on the deck above only added to the experience.) For us, it made for a once-in-a-lifetime memory.



Boley Lake, Babcock State Park. This lake offers lots of opportunities for the angler.



On the catwalk under the bridge.

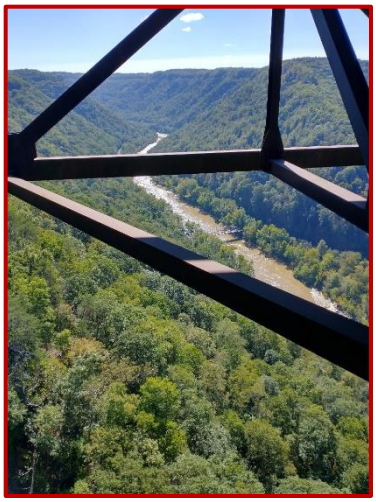


View of the top level of the New River Gorge Bridge. Construction began in 1974, and the bridge opened in 1977.

Babcock State Park, 20 minutes away from the New River Gorge NP was our next stop. If Babcock is typical of West Virginia's state parks, the state's residents are truly fortunate because it's just beautiful there.

Our final stop: the abandoned town of Thurmond within the park's boundaries. At one time, Thurmond was a busy rail junction and servicing area. In fact the tracks, which are still in service, run directly in front of once-thriving shops, banks, and other businesses. The coal tower, used to refuel coal-burning steam locomotives, now stands as a relic to a different time.

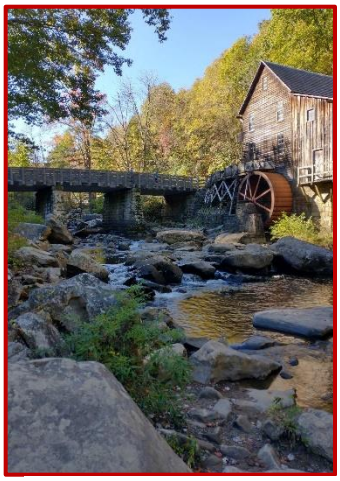
If one is looking for adventure close to home, West Virginia is a perfect choice!



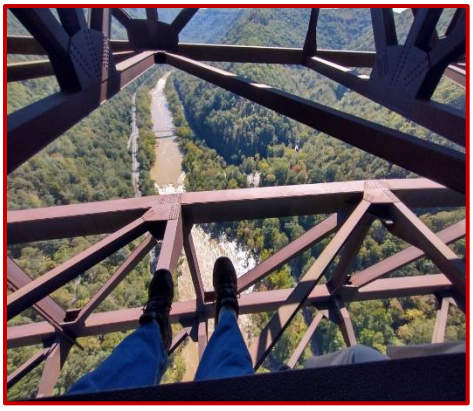
New River Gorge looking east from the bridge catwalk.

Thurmond's long-abandoned coaling tower. Built 1929 and retired in the late 1950's.

Main Street, Thurmond, WV. The rail line is owned by CSX and is still active.

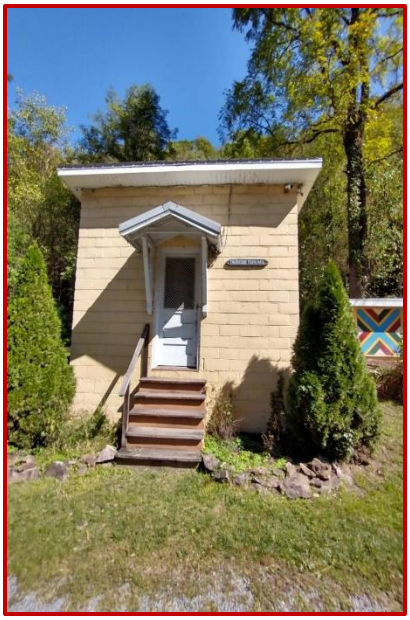


Preserved grain mill, Babcock State Park, Clifton, WV.



Dangling our feet 850 feet above the New River.

Side view of Thurmond's coaling tower.



Thurmond's Town Hall, now preserved.

December Net Sked

Dec	4	AC8NW
Dec	11	AC8TN
Dec	18	WT8O
Dec	25	KD8ACO

Nets are run every Wednesday at 9:00 PM on:

146.820 (PL 110.9)

443.825(+) PL Tone 131.8
Digital Yaesu Fusion / C4FM
Linked to the 146.82 Repeater

EchoLink Node 343470 (K8ZFR-R)

Allstar Node 47067

WIRES X Node 91242-Room 01242

Jim's Story
John, NV8Y

This past summer I volunteered at a church festival. During our tear-down process, one of our volunteers suddenly passed out with a heart attack and slumped to the ground. The person working next to him quickly alerted the rest of us as to what had just happened. Right away, everyone stepped into action and started helping Jim.

One person called 911.

Others quickly started CPR on Jim.

Another person got a defibrillator from the school gymnasium.

But even after using the defibrillator and continuing the CPR, Jim was still unresponsive. It didn't seem like Jim was going to make it.

An EMS team arrived a few minutes later. They continued the CPR and eventually got Jim into their ambulance and off to the hospital.

Just recently, I saw Jim at the church. I could not believe how well he looked. His guardian angel must have been watching over him (and all of us) that summer day.

Ham radio clubs have many older members. Any of us could be the next Jim. Would you know what to do if something like this happened at your radio event.

CARS Repeaters

146.820 (-) PL Tone 110.9

Analog Repeater

Main Site – Brecksville

Receive Only Site – Brunswick

Receive Only Site – Shaker Hts.

AllStar Node 47067

EchoLink Node 343470 (K8ZFR-R)

WIRES X Node 91242 Room 01242

****

443.825 (+) PL Tone 131.8

Digital Yaesu Fusion

Linked to 146.820 Repeater

Brecksville

****

444.75 (+) PL Tone 131.8

Analog Repeater

Not Linked to Other Repeaters

Shaker Hts.

And another one bites the dust!

Fred, K8JG

And the counting continues! The last half-century has watched notable radio parts and equipment manufacturers, retailers and distributors close their business doors including (and in no particular order) Allied, Lafayette, EICO, Heathkit, Collins, Dentron, Radio Shack, Drake, Universal Radio, Ten-Tec, Amateur Electronic Supply (AES), Swan, EF Johnson, Signal-One…and now MFJ! And, with the shuttering of MFJ doors, we also will lose MFJ rescued corporations like Ameritron, Cushcraft, Hy-Gain, Mirage and Vectronics. Ironic isn't it? MFJ rescued these five manufacturers from financial demise only to extend their "leases on life" by unintentionally kicking the can down the road to a later demise day.

Amateur radio operators, short wave listeners, electronic hobbyists, experimenters, public broadcasters and service technicians to name just a few, have all come to depend on MFJ products in the furtherance of their interests, hobbies and professions. When (the collective) we weren't quite so "antique", we had many if not most of the manufacturers and distributors cited above available to us. But none marketed (and manufactured in the US) a product line as broad and as encompassing as that offered by MFJ in early 2024. A product line that just seemed to have something for virtually every radio enthusiast's wants…or needs. Who among us hasn't taken a QST, an HRO catalog, a DX Engineering, or an MFJ flyer to "the reading room" for thoughtful consideration and contemplation of MFJ and other product offerings?

The impact of MFJ ceasing manufacturing operations will be felt far and wide. Perhaps, I would argue, it will be more broadly felt than any of the single closings cited earlier. Why, because MFJ is one of the last "made in the United States" companies manufacturing a comprehensive range of radio and related products. A fact that is important to many buyers. Why because MFJ offered an expansive and evolving product line that appealed to novice's, experienced amateur operators, and SWL's alike. Why because MFJ offered a "no matter what" 12 month (conditional) warranty on its products to original purchasers from authorized dealers (or MFJ). Why, because MFJ provided out of warranty service at a stated bench labor rate for its products (plus shipping). Why; because MFJ helpfully made all of their product manuals available on their website as PDF documents. Why; because MFJ deployed a liberal advertising budget to alert "the market" to its extensive product line month in and month out.

Yes, jobs will be lost and that certainly affects the local Starkville, MS community in terms of lost income and corporate tax revenues. But perhaps more importantly the lost "purchasing" multiplier that those employee incomes produced in buying power will also be lost. We can imagine that the financial impact will ripple down well beyond the Starkville community. Who will lose? Certainly the loss of advertising dollars will be felt by the ARRL, HRO and perhaps DXE and others that MFJ supported. But MFJ also had a road show. Their expansive booths were readily found at hamfests including the Dayton Hamvention, Orlando HamCation and Huntsville to cite a few. Local economies in those towns also felt a financial boost from MFJ employee expenditures during these events. What cannot be quantified are the future MFJ contributions to profit that will be subtracted from radio equipment sales by retailers and distributors globally with MFJ's closure.

As radio aficionados, we are fortunate to enjoy a free-market economy where we can buy what we want (budget permitting), when we want it and, from whom we want it. Our ability to learn about just what is available for purchase, where it is available and at what price, has been superbly enhanced by the internet. MFJ has been a growing and ever-present market force throughout much of my 60+ years of "hamming." MFJ was "in your face" with their advertising. That's how we discovered our "new toys." The amateurs of tomorrow will lack the vital resource that MFJ has become for so many of us. Sad for sure!

Please accept our collective thanks, Mr. Jue and the hundreds of MFJ employees, for the gift of 52 years of electronic innovation and market stimulation. In closing, a "73" would be fitting as a way of saying thank you!

Alas, the Western Union 92 Code of 1859 suggests that a "30" ("No more – the end") is tragically more apt.

The views expressed here are those of the author only and do not reflect the opinions, values or policies of the Cuyahoga Amateur Radio Society or its broad field of members and supporters.

Honorary Members

Any person who by nature of outstanding or meritorious contribution to the furtherance of amateur radio and the ideals of the Cuyahoga Amateur Radio Society

Robert Check, W8GC
Elected 2/10/15

Thomas Wayne, WB8N
Elected 1/10/17

Dwaine Modock, K8ME/SK
Elected 5/9/17

Toby Kolman, WT8O
Elected 10/10/17

Jerry Smith, NW9H
Elected 5/8/18

Ron Borkey, K8VJG/SK
Elected 5/14/19

Ed Stevens, WB8ROK/SK
Elected 8/10/21

Vince Bak, N8OVW/SK
Elected 11/14/23

The *Wobbly Oscillator* is a publication of the Cuyahoga Amateur Radio Society. Articles from this publication may be reprinted in any ham radio publication, if credit is given to this publication and the author, if known. All submissions should be emailed to: Toby Kolman, WT8O at wt8o@att.net

2024 CARS Committees, Officers, Board and Trustees

CARS 2024 Committees

50/50
Chair: Andy Evridge, KD8SCV

Audio/Video
Chair: Scott Smith, AC8NW

Awards
Co-Chairs: Bob Check, W8GC and Toby Kolman, WT8O

Fund Raising
Chair: Bob Check, W8GC
Members: Ron Hollas, K8RJH, Matt Perlman, KE8OZU and Gary Schmid, WA8GCR

ARRL Liaison
Chair: Ron Hollas, K8RJH

Audit
Chair: Ron Hollas, K8RJH
Members: Eddie Stevens, KD8FTS and Toby Kolman, WT8O

Field Day
Co-Chairs: Bob Robbins, K8RGI and Toby Kolman, WT8O
Members: Scott Smith, AC8NW, David Korow, AC8TN, Arp Viiberg, K8ARP, Ron Hollas, K8RJH, Andy Evridge, KD8SCV and Mark Moro, WJ8WM

Hamvention Bus
Chair: Eddie Stevens, KD8FTS
Member: Toby Kolman, WT8O

Historian

Chair: Toby Kolman, WT8O

Holiday Party, Summer Picnic

Chair: Toby Kolman, WT8O
Members: Arp Viiberg, K8ARP, Kim Balach Costa, KD8FTU, Diane Balach, KD8FTV and Mark Moro, WJ8WM

License Classes

Chair: David Noeth, KD8ACO
Members: Joel Chaney, K8SHB and Toby Kolman, WT8O

Media Representative

Chair: Andy Evridge, KD8SCV

Membership

Chair: Toby Kolman, WT8O
Member: Matt Perlman, KE8OZU

Net

Chair: Toby Kolman, WT8O
Members: Scott Smith, AC8NW, David Korow, AC8TN, Ron Hollas, K8RJH and David Noeth, KD8ACO

Newsletter

Chair: Toby Kolman, WT8O

Programs at Meetings

Chair: Joe Ulaszewski, KD8BAL
Members: Eddie Stevens, KD8FTS and Matt Perlman, KE8OZU

Property to Sell Custodian

Chair: Bob Check, W8GC

Public Service

Chair: Eddie Stevens, KD8FTS
Member: Arp Viiberg, K8ARP

QSL Manager

Chair: Metro Sinko, W8MET

Quartermaster

Chair: Toby Kolman, WT8O

Records Custodian

Chair: Terry Pillatt, KB8DTC

Refreshments - Coffee

Chair: John Dernar, NU8Y

Refreshments - Donuts

Chair: Matt Neely, NU8H

Refreshments - Pop

Chair: Ron Hollas, K8RJH

Scholarship

Chair: Toby Kolman, WT8O
Members: Bob Robbins, K8RGI, Ron Hollas, K8RJH, Matt Perlman, KE8OZU and Mark Moro, WJ8WM

Sunshine (Welfare)

Chair: Andy Evridge, KD8SCV

Technical

Chair: Scott Smith, AC8NW
Members: Mark Scoville, AD8KE, Ron Hollas, K8RJH, Terry Pillatt, KB8DTC, Mark Rosewicz, KC8ESG, David Noeth, KD8ACO and Mark Moro, WJ8WM

VE Exams

Chair: Metro Sinko, W8MET

Webmaster/email

Chair: Bob Check, W8GC
Member: Matt Perlman, KE8OZU

2024 Officers

President

Toby Kolman, WT8O
440-525-6109
wt8o@att.net

Vice-President

Ron Hollas, K8RJH
216-379-7440
ron@hollas.co

Secretary

Matt Neely, NU8H
216-965-4476
matt@matthewneely.com
Alternate Secretary: Matt Perlman, KE8OZU

Treasurer

Matt Perlman, KE8OZU
216-337-1540
matt@seagem.me

CARS 2024 Executive Board

Board Chair

Mark Moro, WJ8WM
216-496-2871
Alternate: Arp Viiberg, K8ARP

Even Year Board Members

Scott Smith, AC8NW, John Dernar, NU8Y and Mark Moro, WJ8WM

Odd Year Board Members

Arp Viiberg, K8ARP, Bob Robbins, K8RGI and Eddie Stevens, KD8FTS

CARS License Trustees

K8ZFR Trustee

Toby Kolman, WT8O

W8BM Trustee

Mark Moro, WJ8WM

W8HBI Trustee

Matt Perlman, KE8OZU

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